

REMARKS

This Amendment addresses the Office Action mailed October 21, 2003. In this Amendment, claims 1, 23, 24 and 25 are amended. No new matter is added by these Amendments. Claims 29-46 and 52-55 are canceled. Claims 1-28 and 47-51 are pending in this case.

Interview Summary

On December 15, 2003, Applicants' undersigned representative Kate DeVries Smith conducted a personal interview with Examiner Rodriguez. Applicants' undersigned representative sincerely thanks Examiner Rodriguez for assistance with understanding the rejection and understanding the Examiner's viewpoint on the content of the cited prior art reference, U.S. Patent No. 5,336,189 to Sealfon. The pending claims were discussed and the content of Sealfon was discussed. Proposed language for claim amendments was discussed in order to distinguish the pending claims from Sealfon. Applicants' undersigned representative thanks Examiner Rodriguez for assistance with identifying proposed language that distinguishes from Sealfon. Agreement was not reached with respect to all the claims.

Prior Art Rejections in View of Sealfon

Claims 1-28 and 47-51 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,336,189 to Sealfon. Applicants respectfully traverse this rejection. In the interest of expediting prosecution, amendments have been made to independent claims 1, 23, 24, and 25. Each of the independent claims is discussed below with respect to Sealfon.

Claim 1 relates to a cartridge including a cylindrical barrel and a plunger. Claim 1 has been amended to specify that the open end of the cartridge has an outer edge that is symmetrical about a central longitudinal axis extending from the open end to the closed end. As Examiner Rodriguez agreed in the interview conducted December 15, 2003, Sealfon does not show an open end of a cylindrical cartridge that has an outer edge that is symmetrical about a central longitudinal axis. This amendment to the claims is supported by the specification as originally

filed in Figure 16 showing the open end 212 as having an outer edge that is circular. Figure 16 is discussed at page 14, lines 26-27. The symmetric nature of the outer edge of the open end of the cartridge barrel allows the cartridge barrel to be inserted into the cartridge chamber of a pump without having to rotate the cartridge to a specific orientation. In contrast, Sealfon describes a syringe 10 having a flange 50 at its open end as shown in Figure 3 of Sealfon, where the flange has slots 52 that register with male members on the housing 24 to assure the positioning of the barrel volume indicia directly behind the transparent portion of the hand grip. (Sealfon, column 4, lines 2-9.) Accordingly, as shown in Figure 3 of Sealfon, Sealfon does not teach or describe a cartridge barrel with an open end having an outer edge that is symmetrical about a central longitudinal axis extending from an open end to a closed end of the cartridge barrel. As a result, claim 1 and dependent claims 2-15 are patentable over Sealfon.

Claim 23 relates to a plunger for use with the medication cartridge where the plunger includes a first tab and a second tab projecting inwardly from an interior wall face. Claim 23 was amended to specify that the plunger has a conical closed end and a groove defined in the exterior cylindrical wall face for receiving an O-ring. Claim 23 was also amended to specify that the interior cylindrical wall face has a uniform diameter along its length with the exception of the first and second tabs projecting inwardly. These claim amendments are supported in the patent application as originally filed at Figure 10 illustrating the exterior of the plunger and Figure 14 illustrating a view of the open end of the plunger. These features of the plunger are described in the application at page 14, lines 1-11. Claim 24 has been amended to specify that the closed end of the plunger is conical, and is supported in the application at page 13, lines 3-5.

In the personal interview, the Examiner indicated that claim 23 as amended to specify the structure of the interior cylindrical wall face is allowable over Sealfon. The piston 14 of Sealfon as illustrated in Figure 2 does not include the features of claim 23. Accordingly, Applicants respectfully submit that independent claim 23 and dependent claim 24 are allowable over Sealfon.

Claim 25 relates to a removable cartridge rod for use with a medical cartridge including a shaft with an interface cylinder at its end. The interface cylinder defines a first channel having

an axial portion and a locking portion disposed in a circumferential direction around an outer surface of the interface cylinder. Claim 25 was amended to specify that the interface cylinder includes a channel end wall defining a terminal end of the locking portion of the first channel.

This claim amendment is supported in the application as originally filed at Figures 10, 12 and 13 that illustrate the interface cylinder of the cartridge rod and show that the locking portion 314 of the first channel 308 includes a terminal end wall and that the locking portion 326 of the second channel 322 also includes a terminal wall. As Examiner Rodriguez agreed in the personal interview on December 15, 2003, Sealfon does not include these features. In contrast, Sealfon illustrates a straight plunger 46 for filling the syringe having a key 68 with two laterally extending segments 70 at its end, as shown in Figure 2 and Figure 5 of Sealfon and described at column 4, lines 38-42. Accordingly, claim 25 and dependent claims 26-28 are patentable over Sealfon.

Claim 16 relates to a cartridge barrel including a cylindrical barrel wall and a cylindrical end wall projecting from a closed end of the cylindrical barrel wall. The end wall includes axial guides on an exterior face. The syringe 10 of Sealfon includes a luer lock outlet 20 at its closed end. The luer lock outlet 20 appears to have a smooth exterior face and axial guides are not illustrated or described on the luer lock outlet 20 of Sealfon. Examiner Rodriguez in the personal interview of December 15, 2003 agreed that Sealfon does not illustrate axial guides on the luer lock outlet 20, although she stated that this feature might be found in another reference. Applicants respectfully submit that claim 16 and dependent claims 17-22 are patentable.

Claim 47 relates to a medication cartridge including a cartridge barrel having a cylindrical end wall and axial guides on an exterior face of the cylindrical end wall. Sealfon does not teach axial guides. Accordingly, claim 47 and dependent claims 48-51 are patentable over Sealfon.

In light of the Amendments and Remarks, Applicants respectfully request allowance of pending claims 1-28 and 47-51.

Information Disclosure Statement

In the Office Action, the Examiner commented that the Information Disclosure Statement filed May 6, 2003 did not include a legible copy of each reference. The Form 1449 was returned with the Office Action with the references being crossed out as not considered. Applicants respectfully submit that the 11 references listed on the Supplemental Information Disclosure Statement filed May 2, 2003 were provided with that submission. In addition, Applicants are filing with this Amendment a new Supplemental Information Disclosure Statement and copies of the 11 references, along with one new reference. Applicants respectfully request that the Examiner review the Supplemental Information Disclosure Statement and cited references and initial each reference.

Priority

In the Office Action, the Examiner comments that the first paragraph of the specification does not contain a specific reference to claim priority to the applications listed in that paragraph. Applicants acknowledge the Examiner's comment and note that Applicants do not intend to claim priority to any prior application. Instead, the purpose of the first paragraph of the specification is to make the reader aware of several related patent applications that were filed on the same day as this application. This paragraph has been updated in this Amendment to state the serial number of these concurrently filed patent applications.

Drawings

In the Office Action, the Examiner commented that reference number 149 as set forth on page 12, line 25 does not appear in the drawings. Applicants have amended this line to change reference number 149 to reference 138 to properly refer to the threads on the lead screw 136.

Conclusion


In conclusion, Applicants respectfully submit that the pending claims 1-28 and 47-51 are in condition for allowance. The Examiner is encouraged to contact Applicants' undersigned representative if any issue prevents allowance of this application.

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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